

LISTING OF CLAIMS

This listing of claims replaces all prior versions and listings of claims in the patent application.

Claim 1 (currently amended): A flexible container comprising:

a plurality of panels, each panel having an end and an end segment extending from the end, each end segment having opposing tapered peripheral edges and at least two end segments have a generally trapezoidal shape, the plurality of panels joined together to form a sleeve, the panels each having a fold line ~~an end edge~~ that cooperate to define an imaginary plane at one end of the sleeve; and

a first end panel composed of the plurality of end segments folded at the fold line to contact each other, the end segments sealed to each other along the tapered peripheral edges ~~connected to the panels at the one end of the sleeve~~, the first end panel having at least one portion extending outwardly from the sleeve beyond the imaginary plane when the first end panel is in an unfolded position; and

a second end panel ~~connected to the panels~~ formed at an opposite end of the sleeve wherein the ~~plurality of panels~~ sleeve and the end panels form a closed flexible container having ~~capable of maintaining a sterile barrier to an interior volume of the flexible container~~ of at least about 200 liters.

Claim 2 (original): The container of claim 1 wherein the panels form a polygonal sleeve.

Claim 3 (currently amended): The container of claim 1 wherein the panels each have a second end and a second end segment extending from each second end, the second end segment having opposing tapered peripheral edges, the panels each having a second fold line ~~edge~~ that cooperate to define a second imaginary plane at the opposite end of the sleeve, the second end panel composed of the plurality of second end segments folded at the fold line to contact each other, the second end segments sealed to each other along the opposing tapered peripheral edges, the second end panel having at least one portion extending beyond the second imaginary plane.

Claim 4 (currently amended): The container of claim 3 wherein ~~the~~ a portion of the second end panel extends outwardly from the sleeve.

Claim 5 (previously presented): The container of claim 1 wherein first and second opposite side panels of the plurality of panels are folded on top of themselves when the flexible container is in a folded position.

Claim 6 (original): The container of claim 1 wherein the plurality of panels comprises four panels cooperatively forming a sleeve having a generally rectangular cross-section.

Claim 7 (original): The container of claim 6 wherein two opposing panels are gusseted panels.

Claim 8 (original): The container of claim 7 wherein the gusseted panels have a gusset fold.

Claim 9 (previously presented): The container of claim 1 wherein at least one of the first and second end panels is contiguous with the plurality of panels.

Claims 10-11 (canceled).

Claim 12 (currently amended): The container of claim 1 ~~claim 10~~ wherein the ~~connecting members~~ end segments converge to a line.

Claim 13 (currently amended): The container of claim 1 ~~claim 10~~ wherein the connecting members converge to a polygon.

Claim 14 (original): The container of claim 1 wherein one of the panels has a port.

Claim 15 (previously presented): The container of claim 14 wherein the port has a port closure connected thereto.

Claim 16 (original): The container of claim 15 wherein the port closure comprises:
a tube having a first end and a second end, the first end adapted to be connected to the port;

a plug inserted into the second end of the tube, the plug being made from a gas permeable porous material;

a cover having a first member and a second member, the second end of the tube being positioned between the members, the members being sealed together at their respective peripheral edges; and

an elastic band wrapped around the cover and tube.

Claim 17 (currently amended): A flexible container comprising:

a plurality of panels, each panel having an end and an end segment extending from the end, the end segment having opposing tapered peripheral edges, the plurality of panels joined together to form a sleeve, the panels each having a fold line ~~an end edge~~ that cooperate to define an imaginary plane at one end of the sleeve;

a first end panel composed of the plurality of first end segments folded at the fold line, the tapered peripheral edges forming ~~connected to the panels at the one end of the sleeve, the first end panel having~~ a plurality of converging surfaces sealed at the tapered peripheral edges, the surfaces having at least one portion extending outwardly from the sleeve beyond the imaginary plane when the first end panel is in an unfolded position; and

a second end panel ~~connected to the panels~~ formed at another end of the sleeve;

wherein the ~~plurality of panels~~ sleeve and the end panels form a closed flexible container capable of maintaining a sterile barrier to an interior volume of the flexible container of at least about 200 liters.

Claim 18 (currently amended): The container of claim 17 wherein the panels each have a second end and a second end segment extending from each second end, each second end segment having opposing tapered peripheral edges, the second end panel composed of the plurality of the second end segments, the tapered peripheral edges forming ~~has~~ a plurality of converging surfaces which extend outwardly from the sleeve.

Claim 19 (currently amended): The container of claim 17 wherein first and second opposite side panels of the plurality of panels are folded on top of themselves when the flexible container is in a folded position.

Claim 20 (previously presented): The container of claim 17 wherein the panels each have a second fold line ~~end edge~~ that cooperate ~~cooperated~~ to define a second imaginary plane at the second end of the sleeve ~~having the second end panel, wherein the second end panel having~~ a plurality of converging surfaces, ~~the surfaces having~~ has at least one portion extending beyond the second imaginary plane.

Claim 21 (currently amended): A large volume flexible container capable of containing a fluid to be maintained under sterile conditions comprising:

~~a first panel, a second panel, a third panel, and a fourth panel, connected together to form a container structure, connection lines between connected together panels and which are below a top end of the container structure being substantially free of projections, the first each panel having a central segment adjacent an end segment, the central segment having a longitudinal edge and opposing the end segment segments, each end segment having a tapered peripheral edge extending from the longitudinal edge, an angle being defined between the longitudinal edge and the tapered edge, the angle being in the range from about 135.01° to about 138° wherein the panels are connected along the longitudinal edge and the end segments are connected along the tapered peripheral edges to form an enclosed container structure.~~

Claim 22 (original): The container of claim 21 wherein the angle is in the range from about 135.5° to about 136.5°.

Claim 23 (original): The container of claim 21 wherein the angle is 136°.

Claim 24 (currently amended): A flexible container comprising:

a plurality of panels joined together to form a sleeve, the panels each having an end edge that cooperate to define an imaginary plane at one end of the sleeve; and

an end panel ~~connected to the panels~~ formed at the one end of the sleeve, the end panel having at least one portion extending beyond the imaginary plane;

wherein one of the panels has a port with a port closure connected thereto, the port closure comprising:

a tube having a first end and a second end, the first end adapted to be connected to the port;

a plug inserted into the second end of the tube, the plug being made from a gas permeable porous material;

a cover having a first member and a second member, the second end of the tube being positioned between the members, the members being sealed together at their respective peripheral edges; and

an elastic band wrapped around the cover and tube.

Claim 25 (currently amended): A flexible container comprising:

a plurality of panels which form a generally rectangular-shaped container having opposing ends ~~the container having an outer edge at one end which defines an imaginary plane;~~

an end panel at the each one ~~end~~ of the container, each end panel having a plurality of segments with opposing tapered peripheral edges, the segments sealed along the tapered peripheral edges and forming an enclosed container ~~extending outward beyond the imaginary plane; and~~

~~a plurality of spaced apart hanger connectors on a top panel of the plurality of panels, the hanger connectors being located between a center of the top panel and an outer perimeter edge of the top panel.~~

a port located on one of the panels; and

a port closure in sterile communication with the port, the port closure providing sterile access to the interior volume.

Claim 26 (currently amended): The flexible container of claim 25, wherein the plurality of panels define an interior volume of the flexible container to be at least about 200 liters; ~~and wherein one of the panels has a port.~~

Claim 27 (canceled).

Claim 28 (currently amended): The container of claim 21 wherein the enclosed container has first, second, third, and fourth panels ~~define an interior volume of the container structure~~ of at least about 200 liters.

Claim 29 (previously presented): The flexible container of claim 1, further comprising a plurality of spaced-apart hanger connection locations at a top side of the flexible container, the hanger connection locations positioned inward from an outer edge of the top side.

Claim 30 (previously presented): The flexible container of claim 1, wherein the first end panel extending outwardly beyond the imaginary plane is a bottom side of the flexible container.

Claim 31 (previously presented): The flexible container of claim 1, wherein the first end panel extending outwardly beyond the imaginary plane has a generally vertical orientation.

Claim 32 (currently amended): The flexible container of claim 21~~-claim 17~~, further comprising a plurality of spaced-apart hanger connection locations at a top side of the flexible container, the hanger connection locations positioned inward from an outer edge of the top side.

Claim 33 (currently amended): The flexible container of claim 21~~-claim 17~~, wherein the first end panel ~~extending outwardly beyond the imaginary plane~~ is a bottom side of the flexible container.

Claim 34 (currently amended): The flexible container of claim 21~~-claim 17~~, wherein the first end panel ~~extending outwardly beyond the imaginary plane~~ has a generally vertical orientation.

Claim 35 (canceled).

Claim 36 (new): The container of claim 25 wherein the port closure further comprises a communication member having an end attached to the port.

Claim 37 (new): The container of claim 36 wherein the communication member has a length of about six feet to about 30 feet.

Claim 38 (new): The container of claim 36 further comprising a stop member attached to a second end of the communication member.

Claim 39 (new): The container of claim 38 wherein the stop member is a gas permeable, sterile barrier.

Claim 40 (new): The container of claim 39 wherein the barrier prevents fluid from passing into the communication member.

Claim 41 (new): The container of claim 38 further comprising a cover member.

Claim 42 (new): The container of claim 41 wherein the cover member covers the stop member and a portion of the second end of the communication member.

Claim 43 (new): The container of claim 25 further comprising a second port and a vent closure in sterile communication with the second port.

Claim 44 (new): The container of claim 43 wherein the vent closure further comprises a vent tube having an end attached to the second port.

Claim 45 (new): The container of claim 44 wherein the vent closure further comprises a vent plug attached to a second end of the vent tube.

Claim 46 (new): The container of claim 45 wherein the vent plug is a gas permeable sterile barrier to the vent tube.

Claim 47 (new): The container of claim 46 wherein the vent plug equalizes the internal and external container pressure.

Claim 48 (new): The container of claim 47 wherein the vent plug permits complete filling of the container.

Claim 49 (new): The container of claim 48 further comprising a vent valve disposed within said vent tube.

Claim 50 (new): The container of claim 21 wherein the container has an interior volume of at least about 200 liters.

Claim 51 (new): The container of claim 21 further comprising a plurality of spaced-apart hanger connectors on a top panel of the plurality of panels, the hanger connectors being located between a center of the top panel and an outer perimeter edge of the top panel.